

Applicant: Audrey Minden  
Serial No.: 10/693,367  
Filed: October 24, 2003  
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REMARKS

Claims 65, 67 and 68 are pending in the subject application. Applicant has canceled claim 68 without disclaimer or prejudice to her right to pursue the subject matter of the claims in the future. Claim 65 has also been amended to more particularly point out the subject matter which applicant regards as her invention. Support for the amendment to claim 65 can be found in the specification at, *inter alia*, page 24, lines 35-38, page 25, lines 11 and 12 and page 33, lines 20-29. Applicant maintains that this amendment raises no issue of new matter. Accordingly, upon entry of this Amendment, claims 65 and 67 will be pending and under examination in the subject application.

Rejections under 35 U.S.C. §112, First Paragraph

The Examiner rejected claims 65, 67 and 68 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement.

Specifically, claim 65, as previously presented, claimed a purified antibody capable of specifically binding to a human PAK4 serine/threonine kinase comprising the GTPase-binding domain contained within residues 10-30 of the amino acid sequence set forth in SEQ ID NO:2. Claims 67 and 68 are dependent on claim 65.

In response to the rejection of claim 68, applicant notes that this claim has been canceled herein. Accordingly, the Examiner's rejection thereof is moot.

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In response to the rejection of claims 65 and 67, applicant respectfully traverses.

The Examiner alleged that the pending claims do not indicate that the claimed antibody binds to PAK4 within residues 10-30, and therefore the scope of the claim encompasses antibodies that bind to any epitope found within any PAK4 that comprises the residues 10-30. Accordingly, the Examiner alleges that due to the high variability amongst the genus of antibodies of the claimed invention, and since applicant has disclosed only a limited amount of the genus of molecules bound by said antibodies, the claimed invention does not have written support within the specification.

In response, applicant notes that claim 65, as amended herein, recites a purified antibody which binds to a GTPase binding domain of human PAK4 serine/threonine kinase, which domain comprises consecutive amino acids having a sequence as set forth in SEQ ID NO:6. Accordingly, applicant maintains that the antibody of amended claim 65 does not bind to any PAK4 comprising a GTPase binding domain, but rather, an antibody that binds to a GTPase binding domain (i.e., amino acids 10-30 as set forth in SEQ ID NO:6) of human PAK4 serine/threonine kinase.

As indicated above, written support for such a claim is found in the specification. Specifically, page 24, lines 35-38 of the specification provides "a monoclonal antibody directed to an epitope of a PAK4 serine/threonine kinase effective to block binding of a PAK4 serine/threonine kinase to a GTP binding protein..." Applicant notes that examples of GTP

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binding proteins include GTPases, such as Rac and Cdc42Hs, as stated in the specification at page 25, lines 11 and 12. Applicant further notes that on page 33, lines 20-27, the specification states that the GTPase binding domain (GBD), which corresponds to amino acids 10-30 (SEQ ID NO:6) of the PAK4 amino acid sequence, is essential and necessary for the interaction of PAK4 with GTPases. Accordingly, applicant maintains that a purified antibody which binds to a GTPase binding domain of human PAK4 serine/threonine kinase, which domain comprises consecutive amino acids having a sequence as set forth in SEQ ID NO:6 is described in the specification.

Furthermore, applicant notes that written support for dependent claim 67 is found in the specification on page 24, line 35.

In view of the above remarks, applicant respectfully requests that the Examiner reconsider and withdraw the rejection under 35 U.S.C. §112, first paragraph.

**Rejections under 35 U.S.C. §102(e)**

The Examiner rejected claims 65, 67 and 68 under 35 U.S.C. §102(e), as allegedly anticipated by Plowman et al., U.S. Patent Application Publication No. US 2003/0050230 ("Plowman").

In response to the Examiner's rejection of claim 68, applicant notes that this claim has been canceled herein. Accordingly, the Examiner's rejection thereof is moot.

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In response to the rejection of claims 65 and 67, applicant respectfully traverses.

Specifically, the Examiner alleged that claim 65, as previously presented, provided an antibody which could bind to any epitope located on a polypeptide comprising amino acids 10-30 of SEQ ID NO:2. Accordingly, the Examiner alleged that antibodies which bind to epitopes within the 398 amino acid sequence disclosed in Plowman, wherein the 398 amino acid sequence is identical to residues 194-591 of SEQ ID NO:2, could also bind to a polypeptide having the amino acid sequence as set forth in SEQ ID NO:2.

Again, applicant notes that claim 65, as amended, provides a purified antibody which binds to a GTPase binding domain of human PAK4 serine/threonine kinase, which domain comprises consecutive amino acids having a sequence as set forth in SEQ ID NO:6.

Plowman teaches an antibody to a polypeptide having the amino acid sequence as set forth in SEQ. ID. NO:30 which corresponds to amino acids 194-591 as set forth in SEQ. ID. NO:2 in the subject application. Applicant stresses, and the Examiner acknowledges on page 7 of the October 30, 2006 Office Action, that the polypeptide of Plowman does not contain the GTPase binding domain (i.e., residues 10-30 (SEQ ID NO:6)) of the human PAK4 serine/threonine kinase. Therefore, the antibody taught by Plowman cannot anticipate a purified antibody which binds to a GTPase binding domain of human PAK4 serine/threonine kinase, which domain comprises consecutive amino acids having a sequence as set forth in SEQ ID NO:6.

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Accordingly, Plowman fails to teach each and every element of the claimed invention.

In view of the above remarks, applicant respectfully request that the Examiner reconsider and withdraw the rejection under 35 U.S.C. §102(e).

Summary

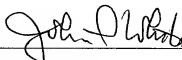
For the reasons set forth hereinabove, applicant respectfully maintains that claim 65, as amended, and claim 67 are in condition for allowance.

If a telephone conference would be of assistance in advancing prosecution of the subject application, applicant's undersigned attorney invites the Examiner to telephone him at the number provided below.

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
No fee, other than the \$1,020.00 fee for a three-month extension of time, is deemed necessary in connection with the filing of this Amendment. However, if any additional fee is required, authorization is hereby given to charge the amount of such fee to Deposit Account No. 03-3125.

Respectfully submitted,



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